Sex Differences in Habitat Use

Location: Okavango Delta, Botswana
Level: PhD
Status: Complete
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Background
Sexual segregation of habitat use occurs in a range of sexually dimorphic mammals, in which males and females present different physical characteristics. According to the forage selection hypothesis, the differing energetic demands experienced by larger male and smaller female elephants will influence their respective patterns of habitat selection.

Methods and Results
We studied habitat selection by male and female elephants in the Okavango Delta, as well as for males of different ages (and therefore sizes), to assess whether size was a driving force behind any sexual differences in habitat selection.

We found that habitat selection varied between males and females, as well as seasonally. During the dry season, when resources were most limited, male habitat choice was different to during the wet season, but the sexual difference in habitat selection was lowest during the dry season. Females were more selective in the flood season, when access to resources was restricted. Contrary to other studies, males showed greater habitat selectivity than females but age, and therefore size, did not affect habitat selection in males, suggesting that this may be more dependent on social groupings, and hence the decision of others, than on individual size and energetic requirements.

Output

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